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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,538	04/02/2001	Antti Toskala	944-003.077	9435
4955	7590	03/17/2005	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/824,538

Applicant(s)

TOSKALA, ANTTI

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Application filed on 4/2/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/9/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 7-11, 15-17, 19 and 21-25 and are rejected under 35 USC 102(e) as being anticipated by Willenegger et al. (Pat.6,775,254 B1).

In claims 1, 7, 15 and 21, Willenegger et al. discloses, in Fig.3, a method comprising the steps of receiving digital user data bits (fig.3, voice/data partition 332a which may have any number of bits, col.6, lines 54-60, is generated by voice/data source 412a in fig.4) for transport on the DPDCH, receiving first digital control bits (fig.3, TPC, TFCI and pilot information) related to the DPDCH for transport on the DPCCH (downlink dedicate channel DPCH, col.5, lines 32-40), receiving second digital control bits (fig.3, high speed packet data partition 334 and its control bits generated by packet data source 412b in fig.4, col.3, lines 45-50, col.14, lines 40-45) related to a high speed downlink packet access (HSDPA) common channel (HS-DSCH) (downlink share channel, col.5, lines 30-42), and multiplexing the digital user data bits, the first digital control bits and the second digital control bits for transport on the downlink DPCH (voice/data, packet data, pilot data, TPC data and TFCI data are provided to TDM mux 416 that multiplexes the data into one data stream, see figures 3, 4 & col.9, lines 50-55).

In claims 2, 8, 16 and 22, Willenegger et al. discloses multiplexing the second digital control bits into one or more slots of a frame of the downlink DPCH (the high speed packet data 334 occupies a portion in slot 330 of frame k, see col.fig.3, col.8, lines 12-22).

In claims 3, 9, 17 and 23, Willenegger et al. discloses multiplexing the second digital control bits into the one or more slots of a frame of the downlink DPCH along with selected first digital control bits (see fig.3, high speed packet data 334 in slot 330 is multiplexed with TPC, TFCI and pilot data).

In claims 5, 11, 19 and 25, Willenegger et al. discloses the one or more slots of a frame of the downlink DPCH used for the second digital control bits are variable in number within repetitive frames (see fig.3, slots 330, 340 describe packet data 344 is allocated either  $\frac{1}{2}$  slot or  $\frac{3}{4}$  slot depending on different spreading factor, see col.8, lines 23-34 & col.5, line 62 to col.6, line 3).

In claims 10 and 24, Willenegger et al. discloses the means for multiplexing (TDM mux 413, fig.4) multiplexes the digital user data bits (voice/data partition 342a) into a slot of a frame (slot 330 of frame k of the downlink DPCH along with the second digital control bits (high speed packet data). See col.8, lines 12-22.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6, 12-14, 18, 20, 27 and 28 are rejected under 35 USC 103(a) as being unpatentable over Willenegger et al. (Pat.6,775,254 B1).

In claims 4, 6, 12, 13, 14, 18, 20, 26, 27 and 28, Willenegger et al. discloses, in fig.3, repetitive frames  $k-1$ ,  $k$  and  $k+1$  wherein frame  $k$  contains slot I with packet data partition 334. Willenegger further discloses when the frame is longer than 10msec, data may be interleaved over 1, 2, 4 or 8 radio frame periods (multiplexing data bits with repetitive frames, see col.14, lines 15-25). Willenegger does not disclose the one or more slots of a frame used for the second digital control bits are fixed in a same position or variable in position within repetitive frames. Based on the interleaving of data bits within repetitive frames, it is strongly believed to enable any person skilled in the art to allocate control bits in the same slot (position) or different slot (position) within repetitive frame is well known in the art. Multiplexing high speed packet data with voice/data in a slot is benefit to concurrently broadcast information at high rate on downlink channel to multiple mobile stations.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Parkvall et al. (pat.6542736 B1) discloses Efficient Radio Link Adaptation and Base Station Sector Selection in a radio Communication System.

Naessl et al. (pat.5,917,826) discloses Method for Controlling the Transmission of Digital Message Signals via a TDM Transmission Medium.

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Jarbot et al.( Pat.6,816,507 B1) discloses Air Interface for telecommunications System with Cordless telecommunications Between Mobile and/or Stationary Transmitting Receiving Devices.

Akiba et al.(Pat. 6,721,300 B1) discloses STTD Encoding Method and Diversity Transmitter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'H. Nguyen' with a stylized flourish at the end.

**HANH NGUYEN  
PRIMARY EXAMINER**